

CITY COUNCIL AGENDA
February 22, 2022
7:30p.m.

The meeting convenes at City Hall, in Council Chambers, 1st Floor, 538 N. Market Street, Wooster, Ohio.

- I. ROLL CALL & ORDERING OF AGENDA**
- II. APPROVAL OF MINUTES**
- III. COMMUNICATIONS FROM MAYOR/ADMINISTRATION**
- IV. PETITIONS/COMMUNICATIONS FROM PUBLIC**
- V. COMMITTEE REPORTS; PUBLIC HEARINGS**
- VI. UNFINISHED BUSINESS**
 - 1. **Second Reading – ORDINANCE NO. 2022-02**
ADOPTING THE OAK HILL TAX INCREMENTAL FINANCING INCENTIVE DISTRICT ECONOMIC DEVELOPMENT PLAN AS A GUIDE FOR FUTURE ECONOMIC DEVELOPMENT AND IN SUPPORT OF A TAX INCREMENT FINANCING DISTRICT AND ALLOWING FOR IMMEDIATE ENACTMENT (Reynolds)
- VII. NEW BUSINESS**
 - 1. **First Reading – ORDINANCE NO. 2022-03**
AN ORDINANCE TO APPROVE AND ADOPT CURRENT REPLACEMENT PAGES TO THE CODIFIED ORDINANCES AND ALLOWING FOR IMMEDIATE ENACTMENT (Reynolds)
 - 2. **First Reading – RESOLUTION NO. 2022-09**
A RESOLUTION AUTHORIZING THE DIRECTOR OF ADMINISTRATION TO PURCHASE A CAMERA TRUCK AND ALLOWING FOR IMMEDIATE ENACTMENT (Silvestri)
 - 3. **First Reading – RESOLUTION NO. 2022-10**
A RESOLUTION AUTHORIZING THE DIRECTOR OF ADMINISTRATION TO ENTER INTO A PROFESSIONAL SERVICES CONTRACT WITH JONES AND HENRY FOR DESIGN AND CONSTRUCTION SERVICES AND ALLOWING FOR IMMEDIATE ENACTMENT (Silvestri)
- VIII. MISCELLANEOUS**
- IX. ADJOURNMENT**

ORDINANCE NO. 2022-02

ADOPTING THE OAK HILL TAX INCREMENTAL FINANCING INCENTIVE DISTRICT ECONOMIC DEVELOPMENT PLAN AS A GUIDE FOR FUTURE ECONOMIC DEVELOPMENT AND IN SUPPORT OF A TAX INCREMENT FINANCING DISTRICT AND ALLOWING FOR IMMEDIATE ENACTMENT

WHEREAS, Section 5709.40(C) of the Ohio Revised Code authorizes the legislative authority of a municipal corporation to create, by Ordinance, an incentive district and declare improvements within that district to be of public purpose; and

WHEREAS, Section 5709.40(A) of the Ohio Revised Code requires an incentive district to have one or more distress characteristics, which may be defined as inadequate public infrastructure serving the district as evidenced by a written economic development plan for the district; and

WHEREAS, the City's Office of Economic Development has studied the Oak Hill area in the vicinity of the Wooster City School District's High School Campus and prepared the Oak Hill Tax Incremental Financing Incentive District Economic Development Plan dated January 19, 2022; and

WHEREAS, the Oak Hill Tax Incremental Financing Incentive District Economic Development Plan address issues such as inadequate public infrastructure to meet development needs and improvements to enhance traffic safety;

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Wooster, County of Wayne, Ohio, that:

SECTION 1. The Oak Hill Tax Incremental Financing Incentive District Economic Development Plan is hereby adopted by this Council and may hereafter proceed to establish the Incentive District under Section 5709.40(C) of the Ohio Revised Code.

SECTION 2. The Office of Economic Development and all other offices and departments of the City are hereby authorized and directed to use the Oak Hill Tax Incremental Financing Incentive District Economic Development Plan to initiate projects that will implement the provisions of the plan, including the establishment of a tax increment financing district to provide financing to public infrastructure improvements.

SECTION 3. Copies of the Oak Hill Tax Incremental Financing Incentive District Economic Development Plan shall be kept on file in the Office of Economic Development.

SECTION 4. This Council finds and determines that all formal actions of this Council and of any of its committees concerning and relating to the passage of this Ordinance were taken in open meetings of this Council or committees and that all deliberations of this Council and of any of its committees that resulted in those formal actions were in meetings open to the public, all in compliance with the law.

SECTION 5. This Ordinance is necessary to the immediate preservation of the public health, peace, safety and welfare of the City, or providing for the usual daily operation of a municipal department or division, and for the further reason that prompt acceptance is necessary to approve the Oak Hill Tax Incremental Financing Incentive District Economic Development Plan, which is necessary to enable the City to implement tax increment financing, which is needed to finance upgrades to inadequate public infrastructure and to eliminate existing and potential hazards to vehicular and pedestrian traffic in the City; wherefore, this Ordinance shall be in full force and effect immediately upon its passage and approval by the Mayor, provided it receives the affirmative vote of at least three-fourths of the members of Council; otherwise, it shall be in full force and effect from and after the earliest period allowed by law.

1st reading 2-7-22 2nd reading _____ 3rd reading _____

Passed: _____, 2022 Vote: _____

Attest: _____ _____
 Clerk of Council President of Council

Approved: _____, 2022 _____
 Mayor

Introduced by: Bob Reynolds

010
2022-02

Request for Agenda Item

Authorization for Bid

Purchase Capital Item

Non-Capital

Division Development	Meeting Date Requested February 7, 2022
Project Name Oak Hill TIF ED Plan	Estimated Total Funds/Costs 0
Is Full Amount Budgeted? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, three readings NOT REQUIRED	
If No, How is the Purchase to be Funded? N/A - Adoption of Economic Development Plan	
Description of Request Requested is Council's adoption of the Oak Hill Tax Incremental Financing Incentive District Economic Development Plan (Ref: January 19 Memo from Econ. Dev.) as guidance for future economic development and in support of a tax increment financing district. With adoption, the City will proceed to formally establish a tax incremental financing district in partnership with the Wooster City School District and Wayne County Commissioners to potentially fund a new roundabout at Oak Hill and Oldman (\$2.1 MM), Oak Hill and W. Milltown with reconstruction of each road (\$4.6 MM), and extension of sanitary sewer with the creation of two lift stations (1.9 MM). TIF creates funding by enabling new real estate development and redirecting the newly created property tax obligation to an infrastructure fund for a period. Current revenues for City, school district, county, and other taxing districts are NOT impacted, and may continue to appreciate. This project is in connection with a proposed housing development and other potential projects in the vicinity.	
Justification / Benefits The EDP will enable programming and create NEW funding to support \$8.6 MM in new public infrastructure to enhance safety and support anticipated future development, including sanitary sewer extension, the reconstruction of Oak Hill and W. Milltown, and the installation of two roundabouts to enhance safety and support anticipated future development.	
Will this Project affect the City's Operating Costs N/A, however, subsequent use of TIF is expected to CREATE funding for future projects.	
What Alternatives Exist and what are the Implications of the Alternatives No adoption - City would not pursue proposed projects until funding from developers, grants, or appropriations from current revenues, could be committed. Such would stall or prevent new development.	
Is this a Sole Source Bid or Non-Bid Situation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Explain The Circumstances: N/A	
Is there a need for Suspension of the Rules or a Time Frame when this must be passed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Note Reasons A suspension of rules permits the project provides for earlier consideration from WCSD.	
NOTE: Emergency Clause Required if Legislative Effective Date is IMMEDIATE.	
Manager Requesting: Jonathan Millea	Date: 2 February 2022

Approved for Agenda Yes No

City of Wooster, Ohio
Oak Hill TIF
Schedule of Events

<u>Event</u>	<u>Earliest Dates</u>	<u>Status</u>
City Council Approval of Economic Development Plan and finalize incentive district map(s) [as emergency]	TBD	
Deliver Property Owner Notice (<i>must be delivered at least 30 days prior to public hearing</i>)	By February 18	
Deliver County Notice (<i>must be delivered at least 45 business days prior to passage of TIF ordinance</i>)	By February 25	
Deliver School District Notices (<i>must be delivered at least 45 business days prior to passage of TIF ordinance unless waived</i>)	By February 25	
School Board approval (<i>Note – Must occur prior to Passage of TIF Ordinance</i>)	TBD	
Spring Run Development Agreement [immediate enactment] (<i>Note – To occur prior to Sanitary Sewer Bid-Award Authorization.</i>)	TBD	
First reading of the TIF Ordinance and Public Hearing (<i>first reading can occur prior to March 21 – public hearing must be at least 30 days after property owner notice</i>)	March 21, City Council Meeting	
Second reading of the TIF Ordinance	April 4, City Council Meeting	
Sanitary Sewer Authorization to Bid/Award [immediate enactment] (<i>Note – Concurrent or after authorization of a Development Agreement for Spring Run Project.</i>)	April 4 or 18 City Council Meeting	
Passage of TIF Ordinance [immediate enactment] (<i>Note – Council must wait at least 30 days after the public hearing on March 21st before voting on the TIF Ordinance, therefore the TIF Ordinance should not be voted on the City Council Meeting on April 18th</i>)	May 2, City Council Meeting	
TIF Ordinance filed with Ohio Department of Development	By May 17	



538 N. Market Street P.O. Box 1128
Wooster, Ohio 44691-3406



Jonathan S. Millea, AICP CEcD
Development Coordinator
Phone : (330) 263-5250
Fax: (330) 263-5247
Email: jmillea@woosteroh.com

MEMO

To: Wooster City Council, Wooster Administration
From: Jonathan Millea, Development Coordinator
Date: 1/19/2022
Re: Oak Hill TIF Incentive District

Dear Members of Wooster City Council,

Following up on our earlier memos for the proposed Oak Hill TIF Incentive District, please find attached our *draft* Economic Development Plan, which is the first official step to commence the project.

Specifically, the plan outlines a path to performing and funding the following public improvements:

- Public sanitary sewer extension (**\$1.9 MM**)
 - Serves multiple sites, no improvements are internal to any single development.
 - Supports Wooster City School District (WCSD)'s Follis Field and the adjacent ice arena, and possible future facilities.
 - Enables the proposed 91-home Spring Run (earlier named Wakefield) subdivision project
 - Project will financially guarantee a portion of the total public infrastructure costs.
 - Provides sanitary sewer access to 62 additional vacant developable acres, lowers the access burden for 49 additional acres in the vicinity, creating additional opportunities to welcome new housing in support of Wooster's business community.
- New roundabout at Oldman and Oak Hill to enhance safety (**\$2.1 MM**)
- Roundabout at W. Milltown and Oak Hill plus road reconstruction to enhance safety (**\$4.6 MM**)
 - Currently the sole responsibility of Wayne County and Wayne Township.
 - City recently partnered with Wayne County on a grant to improve this intersection, but not enough funds were available, or will be for the foreseeable future.

The plan proposes the creation of an approximate 275-acre district under Ohio Revised Code 5709.40(C), in which future tax revenues from new construction will be redirected into a special fund to reimburse or finance public infrastructure. TIF **does not** impact or reduce existing tax revenues.

Next Steps: Once this has been reviewed by legal counsel, we look forward to presenting it to you at your **February 7th 2022** meeting. In conjunction with this plan, we also anticipate a petition for annexation of 73 acres surrounding the intersection of Oak Hill Road and W. Milltown. After Council would adopt the plan, the proposal would advance to the Wooster City School District for its approval by way of a revenue-sharing agreement. Following this and annexation processes, Council would be permitted to formally establish the TIF Incentive District. Separately, a development agreement, guaranteeing a minimum annual service fee, would be required for private developers seeking to access the new infrastructure.

Please let me know if I may answer any questions. Thank you for your consideration!

Sincerely,

Jonathan Millea, AICP, CEcD

Development Coordinator

ORDINANCE NO. 2022-03

AN ORDINANCE TO APPROVE AND ADOPT
CURRENT REPLACEMENT PAGES TO THE
CODIFIED ORDINANCES AND ALLOWING FOR
IMMEDIATE ENACTMENT

WHEREAS, various ordinances of a general and permanent nature have been passed which should be included in the Codified Ordinances, and

WHEREAS, certain traffic and misdemeanor provisions should be revised to comply with current State law; and

WHEREAS, the codification of such ordinances, together with the new matter to be adopted, the matters to be amended and those to be repealed are before the Council;

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Wooster, Ohio:

SECTION 1. The ordinances of the City of Wooster, Ohio, of a general and permanent nature, as revised, recodified, rearranged and consolidated into component codes, titles, chapters and sections within the 2021 Replacement Pages to the Codified Ordinances are hereby approved and adopted.

SECTION 2. The following sections are hereby amended, enacted or repealed as respectively indicated in order to comply with current State law:

Administrative Code

101.03 Rules of Construction. (Amended)

Traffic Code

301.183	Low-Speed Micromobility Device. (Added)
301.22	Pedestrian. (Amended)
301.51	Vehicle. (Amended)
303.082	Private Tow-Away Zones. (Amended)
331.211	Report of Vehicle Failing to Yield Right of Way to Public Safety Vehicle.(Amended)
331.37	Driving Upon Sidewalks, Street Lawns or Curbs. (Amended)
333.03	Maximum Speed Limits. (Amended)
335.02	Permitting Operation Without Valid License; One License Permitted. (Amended)
335.021	Ohio Driver's License Required for In State Residents. (Amended)
335.04	Certain Acts Prohibited. (Amended)
335.09	Display of License Plates or Validation Stickers; Temporary License Placard. (Amended)

RESOLUTION NO. 2022-09

A RESOLUTION AUTHORIZING THE DIRECTOR OF
ADMINISTRATION TO PURCHASE A CAMERA TRUCK
AND ALLOWING FOR IMMEDIATE ENACTMENT

WHEREAS, the City requires a new camera truck for sewer maintenance throughout the City.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF
WOOSTER, OHIO:

SECTION 1. The Director of Administration is authorized to purchase a new camera truck for sewer maintenance use throughout the City, with payment to originate from the Water Fund (501) and the Sanitary Sewer Fund (502).

With respect to such purchase, the Director of Administration will advertise according to law and enter into a purchase contract with the lowest and best bidder, except that if the item is available through a state-sponsored cooperative purchasing program or can be accomplished through a vendor upon equivalent terms, conditions and specifications, but at a price which is equal to or lower than that which is available from the state-sponsored program, s/he may make such purchase therefrom if s/he determines that the price and availability are more advantageous to the City.

SECTION 2. The cost of such purchase is included in the 2022 Appropriations Budget.

SECTION 3. This Council finds and declares that all formal actions concerning and relating to the adoption of this Resolution occurred in an open meeting of this Council or its committees, in compliance with the law.

SECTION 4. This Ordinance is hereby declared to be necessary to the immediate preservation of the public health, peace, safety and welfare of the City; wherefore, this Ordinance shall be in full force and effect from and immediately after its passage and approval by the Mayor; provided it receives the affirmative vote of at least three-fourths of the members of Council; otherwise it shall take effect and be in force from and after the earliest period allowed by law.

Introduced: _____ Passed: _____ Vote: _____

Attest: _____
Clerk of Council President of Council

Approved: _____, 2022
Mayor

Introduced by: David Silvestri

Request for Agenda Item

Authorization for Bid

Purchase Capital Item

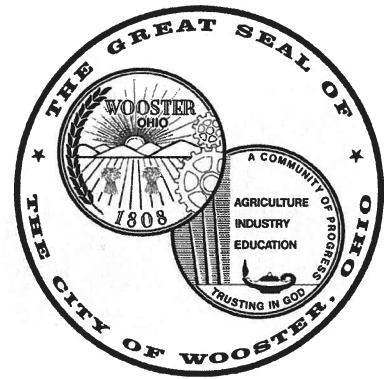
Non-Capital

Division Utilities- DCM	Meeting Date Requested 2-21-22
Project Name Camera Truck Purcahse	Estimated Total Funds/Costs \$232,000
Is Full Amount Budgeted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If YES, three readings NOT REQUIRED	
If No, How is the Purchase to be Funded? 	
Description of Request A resolution authorizing the Director of Administration to purchase a new 2022 Ford E450 truck with a new Envirosight sewer televising camera system from Best Equipment. Best Equipment is the selected firm based on State Term Bid pricing for the equipment and functionality for the staff. Three bids were received regarding this asset purchase. The current 2003 asset will be sold on Govdeals after new purchase is complete.	
Justification / Benefits The purchase replaces a 2003 camera truck and system. Due to past failures and end of life cycle costs, this purchase was included in the 2022 budget. This will ensure our on going mission of excllent service to our customers. Please see attachments related to requests.	
Will this Project affect the City's Operating Costs No	
What Alternatives Exist and what are the Implications of the Alternatives No other alternatives exist.	
Is this a Sole Source Bid or Non-Bid Situation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Explain The Circumstances:	
Is there a need for Suspension of the Rules or a Time Frame when this must be passed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Note Reasons Approval will allow for swift order and purchase in the current equipment market.	
NOTE: Emergency Clause Required if Legislative Effective Date is IMMEDIATE.	
Manager Requesting: Nathan W. Coey	Date: 2-9-22

Approved for Agenda Yes No



Nathan W. Coey
Utilities Manager
1020 Old Columbus Road
Wooster, OH 44691
330-263-5284
ncoey@woosteroh.com



February 9, 2022

2022 DCM Budget Initiative, Camera Truck, and System

Please allow this document to serve as narrative and support documentation related to the procurement a new sanitary sewer camera monitoring system and vehicle.

Distribution, Collection and Meter (DCM) Division Background

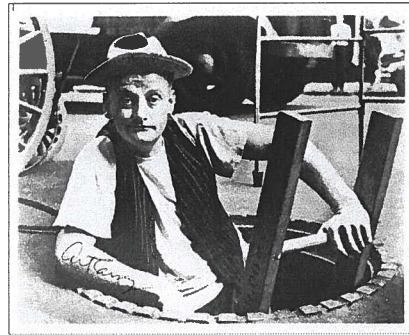
The Distribution, Collection, and Meter (DCM) division's work and service ensure proper service delivery to our customers. DCM assets include 171.3 miles of sanitary sewer main, 145.3 miles of water main, 1,258 fire hydrants, 2,655 water valves, 3,481 sanitary maintenance holes, metering units for the 9,918 (end of 2020) customer accounts, and a well maintained geographic information system (GIS) for the infrastructure location. DCM assets also include a workforce of ten individuals, facilities, sanitary sewer cleaning and televising equipment, excavation equipment, fleet vehicles, and all equipment necessary for task completion.

DCM is most often the face of the department to the customers. The nature of the service wing of the department includes direct customer interaction ensuring customer delivery, including customer requests for service. DCM works close with Utility Billing to ensure timely service delivery, not limited to accurate meter reading, meter replacement, and service verification.

Sanitary Sewer Camera Systems Background and Use

The 2022 DCM Budget request included replacing the current camera vehicle and system. The anticipated and projected budget for this purchase was \$350,000. Since DCM is a subdivision of Wooster Water Utilities, the subsequent budget is funded by the parent water and sewer operations. This purchase is derived equally from water and sewer funds, typical for operations and capital expenditures.

Since the modern closed channel conveyance of human waste from communities, sanitary sewer system maintenance has focused on publicly owned utilities. The Herodian Aqueducts are an example of pushing that waste material out of sight and mind. Early methods, and still today, some large sewers still require entry by inspectors for service and maintenance. The Wooster sewer collection system is designed for cleaning and inspection without entrance. Confined space equipment is utilized if necessary; however, best management practices use equipment and technology for service and maintenance.



Wooster Water Utilities owns and operates a modern combination sewer cleaning truck. The Vactor unit in service was purchased in 2018 as a testament to the ongoing commitment to customer service and effective preventative maintenance. This unit provides methods to internally clean debris from main lines and a vacuum system to remove the debris. A combination unit offers flexibility on cleaning pressures and adequately addresses specific blockages. Historically blockages have been limited to root intrusion, especially in aged main lines; however, aggressive cleaning schedules, root treatment, and infrastructure updates help reduce these types of issues. Every home has a food macerator, commonly known as a garbage disposal in this modern era. While food establishments and the plumbing code have ensured the implementation and maintenance of grease traps, the residential grease accumulations are significant. Cleaning frequencies can also be dictated with old sewers with high and low capacity issues attributed to general debris accumulation in the form of grit or gravel, a common occurrence in any system. The vexatious matter in the modern sewer service worker is the presence of the falsely marketed "flushable wipes." These heavy-duty wipes can bond together to create ropes and balls with the help of the other myriad of garbage vetted through the toilet.

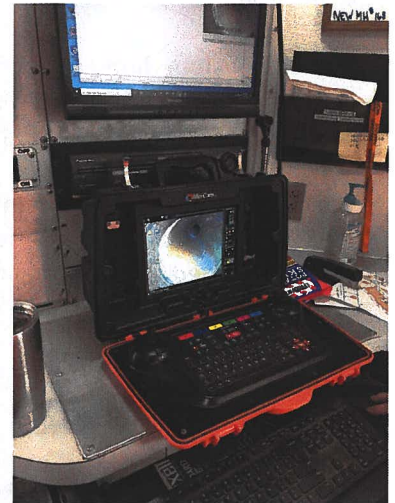
The Ohio Water Environment Association's "Sanitary Sewer System Best Management Practices Manual" suggests that sanitary sewer systems should be cleaned every three to five years. Historically, this method holds with "blind cleaning", a practice of going out to clean everything regardless of line conditions. The utilization of a sewer camera system ensures proper cleaning methods and determines the overall effectiveness and operation of any sewer line. The utilization of a camera system provides efficient cleaning methods and ensure efforts are in line with general pipeline conditions.



In 2003, Wooster Water Utilities invested in a sewer camera truck. The commitment to excellence supported the vision and methods of excellent customer service applied today. The camera equipment allows for the periodic inspection of sewers to ensure proper cleaning cycles. This equipment also assists in troubleshooting and understanding why there may have been a sewer backup. The equipment puts our eyes on the infrastructure in

a safe means. The tool has also helped identify system weaknesses that required maintenance or replacement related to possible root intrusion, pipe separation, and the occasional contractor breaking a main or service line. The combination cleaning truck and camera truck provide significant support for our daily clean water mission and outstanding customer service. Our goal is to provide service that is the envy of other communities, second to none, and if folks could choose their public utility provider, they would select Wooster.

The current camera vehicle and equipment have been in service since 2003. The vehicle, the camera hardware, and software are past the useful life. The 2022 budget initiative includes vehicle and complete equipment replacement. Over the past five years, a total of \$89,103 has been required to service the related systems. In 2017 the camera was replaced, and at that time, a complete system upgrade should have been evaluated. The capital investment request is to replace the camera system with a new chassis. This equipment in our fleet is an example of our commitment to provide unrivaled service to citizens.



Over the past four years, DCM has the following stats to report with the help of the cleaning and camera equipment. A total of 165,376 feet of sewer line was cleaned, and 160,281 feet of sewer line was televised. The contractors that provide this kind of service indicate a possible cost of \$3.25 per foot (staff and equipment) with a total price of \$537,472 or an average of \$134,368 per year. DCM has the equipment, staff, and resources to provide this type of service in-house. Typically routine service and maintenance work is scheduled into the workflow. The versatility of the team and equipment allow for a quick response after hours in a sewer-related emergency.

New Equipment Purchase Information

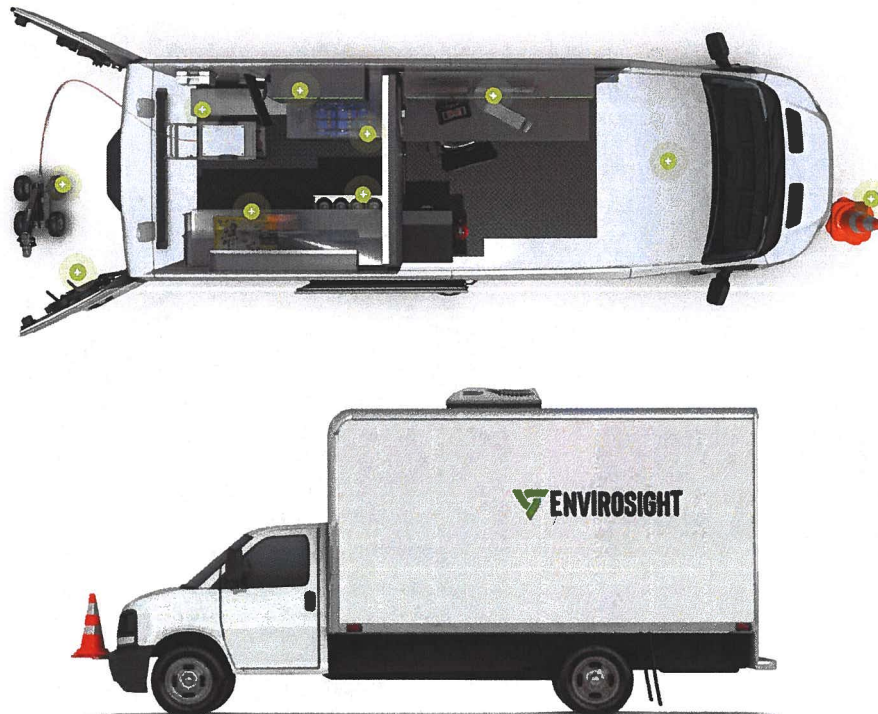
Your support is vital in continuing this level of service to the community. Traditionally, with equipment purchases like this, potential providers are solicited for equipment trial and pricing. The equipment is under State Term Purchase listings that meet bidding threshold requirements. A total of three vendors were requested for demonstrations and price quotes. The systems listed below are all related camera systems and chassis components. The camera system includes controls, features that ensure vision and inspection underwater, retrieval equipment, software for inspection documentation, and critical backup systems to ensure investment protection.

The IBAK System through Jack Doehney, \$270,000

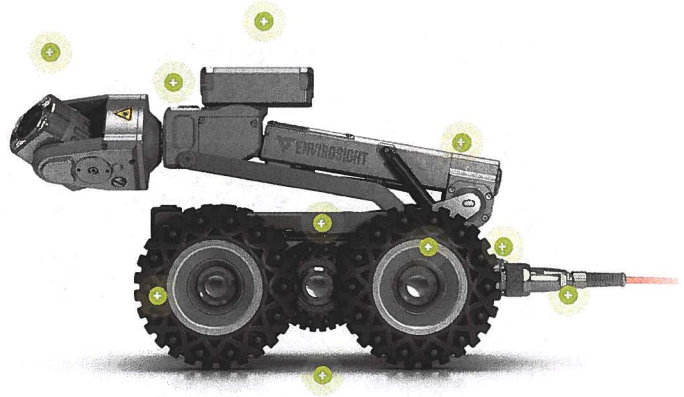
The CUES System through M-Tech, \$240,000

The Envirosight System through Best Equipment, \$232,000

The DCM staff recommends and prefers the products from Best Equipment. 2022, Ford E450 chassis will support the camera system with a 14 feet long box. The storage area will support the camera system, apparatus, and all controls related to performance. The unit is subject to the Ohio State Pricing contract number STS670 with a total cost of \$232,000, well under the requested budget of \$350,000, and can use the savings on pipeline update projects.







The City of Wooster Utilities Department members has taken a solemn oath to operate and protect the public utility infrastructure and protected public health and trust through stewardship. We seek to be proactive and intentional in our efforts to meet the expectations of the regulatory community and the citizens we serve. Our mission and focus centers on serving the public as stewards and effectively and intentionally managing the treatment infrastructure in a way that honors your trust. We are devoted to our mission of service to you in our pursuit of *Safety, Reliability, and Excellence!*

Nathan W. Coey
City of Wooster
Utilities Manager

RESOLUTION NO. 2022-10

A RESOLUTION AUTHORIZING THE DIRECTOR OF
ADMINISTRATION TO ENTER INTO A PROFESSIONAL
SERVICES CONTRACT WITH JONES AND HENRY FOR
DESIGN AND CONSTRUCTION SERVICES AND ALLOWING
FOR IMMEDIATE ENACTMENT

WHEREAS, it is immediately necessary to procure the design and construction services of Jones and Henry for emergency reconstruction of aeration chamber five and repairs to primary clarifiers; and

WHEREAS, Jones and Henry possesses the expertise to provide such engineering services; and

WHEREAS, an emergency exists pursuant to WCO 160.03(d).

WHEREAS, this expenditure is budgeted.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF WOOSTER, OHIO:

SECTION 1. The Director of Administration is hereby authorized to enter into a professional engineering services contract with Jones and Henry for design and consulting services.

SECTION 2. This Council finds and declares that all formal actions concerning and relating to the adoption of this Resolution occurred in an open meeting of this Council or its committees, in compliance with law.

SECTION 3. This Council finds that competitive bidding is not necessary as a real and present emergency arising in connection with the operation and maintenance of aeration chamber five exists pursuant to WCO 160.03(d).

SECTION 4. The costs of this project will not exceed the amount budgeted.

SECTION 5. This Resolution is hereby declared to be necessary to the immediate preservation of the public health, peace, safety and welfare of the City, or providing for the usual daily operation of a municipal department or division. Wherefore, this Resolution shall be in full force and effect from and immediately after its passage and approval by the Mayor; provided it receives the affirmative vote of at least three-fourths of the members of Council; otherwise it shall take effect and be in force from and after the earliest period allowed by law.

Introduced: _____ Passed: _____, 2022 Vote: _____

Attest: _____
Clerk of Council President of Council

Approved: _____, 2022
Mayor

Introduced by: David Silvestri

#3

Request for Agenda Item

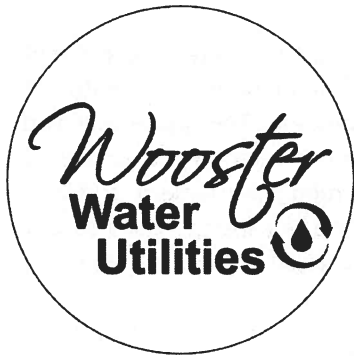
Authorization for Bid

Purchase Capital Item

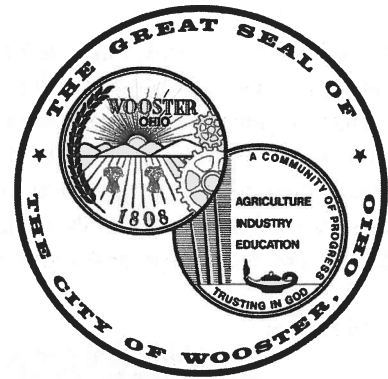
Non-Capital

Division Utilities -- Water Recovery	Meeting Date Requested 2-21-22
Project Name VLR 5 Aeration Repair	Estimated Total Funds/Costs \$76,000
Is Full Amount Budgeted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If YES, three readings NOT REQUIRED	
If No, How is the Purchase to be Funded?	
Description of Request A resolution authorizing the Director of Administration to execute design contract through construction, with Jones and Henry for aeration chamber five failure. The air chamber is a post-market, nontraditional aeration system that has been repaired in the past but is now beyond reasonable repairs. The loss is due to the system providing too much air, 1,900 scfm, and the unit is designed for 1,200 and causes premature wear. Due to the poor installation and application, there is no ability to limit the airflow. The 2014 upgrade included converting tanks 3 and 4 to traditional diffused aeration, and this is the focus of this project. Due to the failure, septic receiving is no longer accepted due to not having all approved treatment components online. The expectation is drawings, bidding, and construction to install diffused air components in line with extended aeration technology with OEPA approval. The contract will also address limitations on the newest and largest primary clarifiers #5&6. Since its installation in 2007, they do not provide complete treatment. The design, construction, and OEPA approval will be for these tanks to be lead operationally.	
Justification / Benefits The project requires OEPA approval, design, bidding and construction. Jones and Henry have been selected due to their ability to navigate this project.	
Will this Project affect the City's Operating Costs No	
What Alternatives Exist and what are the Implications of the Alternatives No other alternatives exist.	
Is this a Sole Source Bid or Non-Bid Situation <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Explain The Circumstances: This is an emergency and quick turn around is imperative to avoid compliance issues	
Is there a need for Suspension of the Rules or a Time Frame when this must be passed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Note Reasons Approval will allow an expedite time and allocation of current funds.	
NOTE: Emergency Clause Required if Legislative Effective Date is IMMEDIATE.	
Manager Requesting: Nathan W. Coey	Date: 2-9-22

Approved for Agenda Yes No



Nathan W. Coey
Utilities Manager
1020 Old Columbus Road
Wooster, OH 44691
330-263-5284
ncoey@woosteroh.com



February 9, 2022

2022 WRF Budget Initiative, Aeration Improvements, and Final Clarifier Support

Please allow this document to serve as narrative and support documentation related to the request of professional services with Jones and Henry to address operational deficiencies.

Verticle Loop Reactors/Aeration System

The aeration system is a biological treatment system commonly referred to as a suspended growth system. An aeration system provides an environment to support physical habitat and growth in the biological treatment of waste streams. The contents are mixed with the flows to be treated while maintaining a mass and bioflofra to support treatment goals. The secondary treatment system consists of Vertical Loop Reactors (VLR) followed by secondary settling tanks. The VLR is a unique system manufactured by Siemens (formerly known as Envirex).

Organic failure occurs when final effluent CBOD5 and/or NH3-N concentrations and/or loadings exceed the permit limits. In November 2021, an aeration chamber failure led to treatment issues due to a tank offline to prevent additional losses. The 2007 improvements converted the existing aeration tanks (which operated in parallel) with fine bubble diffusers into VLRs (operate in series), which use a combination of mechanical aeration and coarse bubble diffusers. There are 5 VLRs that provide the aeration and biological treatment. The design loading rate of 26.1 lbs/day/1000 CF was checked against 10-States Standards and the manufacturer's recommendations. The VLR is a unique aeration process that is, from a 10-State Standards perspective, somewhere between a conventional and extended aeration system. Siemens (VLR manufacturer) recommends between 25 to 35 lbs/day/1000 CF of aeration tank volume with daily peaks as high as 70 lbs/day/1000 CF. URS also completed an evaluation of the ATS VLR design using the influent design criteria used for the 2007 Improvements. Based on this evaluation, the VLRs were designed within 10 State Standards for the 7.5 MGD design flow using the assumed influent loading condition. However, the actual influent loading conditions to the VLR are not consistent with these design criteria. The following analysis evaluated the VLRs based on higher CBOD5, TSS, and ammonia influent loading conditions more representative of the current plant influent.

The 2014 improvements included removing the conventional VLR treatment process in tanks 3 and 4. It is understood that the VLR system remained in tanks 1,2 and 5. The system consists of coarse air diffusers an air channel with a turning vane incorporated with a verticle intermediate wall. The tanks utilize surface mixers. Due to initial application, these configurations have limitations and increase failure rates and repair. The failure of the air chamber in tank 5 led to tank contents being expelled from the tank. The tank was taken out of service to prevent spilled contents from being delivered directly to the receiving stream. It was also identified the chamber was welded and repaired five years previous. An investigation has determined that this air system should have no more than 1,200 scfm of air. During the life of this asset, it has been exposed to air levels constantly at the 1,900 scfm range. The forced additional airflow has caused this failure, then couple that with the corrosive environment and the lack of stainless steel components; this should not be a surprise.

One of the treatment trains is offline and causing some permit violations in the current state. The effluent ammonia level has been on the rise since this failure. The limit exceedances are directly due to treatment capacity reduction in tanks and air supply for the suspended growth treatment process. The quote received from Jones and Henry is to evaluate, design, and construct repairs to the system similar to the extended air/diffused air system installed in tanks 3 and 4 in 2014. Efforts will also include modifying tanks 1 and 2 to simplify operations and fully utilize capacities. It is essential to mention this failure is causing issues to our standard of excellence, and septic receiving is on hold until repairs are made due to current organic loadings.

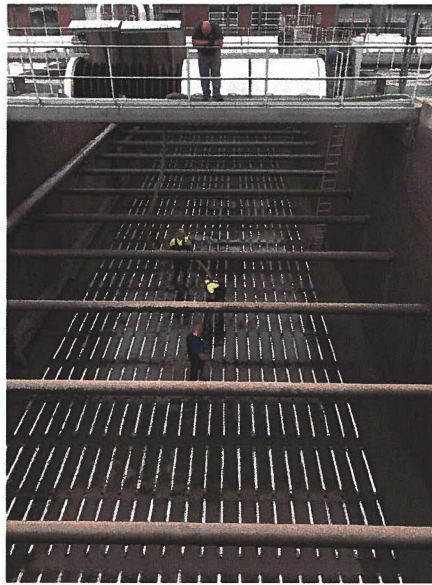
2016 failure



Current failure



Tank 3 and 4 Diffuser System



Final Clarifiers

Clarifier 5 and 6 Repairs

The WRF includes a total of six secondary clarifiers for liquid stream treatment. 2014 improvements addressed design and construction deficiencies after the 2005 project upgrade and related findings and orders from the OEPA. In the early 2000s design, two additional new units were constructed and placed into service. The focus of this was to address the higher flows and prevent any additional solids loss out of the treatment train. The project addressed that, but the units were limited in consistent performance and were not addressed in the 2014 project.

The data charts below indicate that the newest units, tanks 5 and 6 are the largest and provide the most flexible operating ranges given the size and capacity. The units are 80 feet in diameter, with a combined total capacity of 1.35 million gallons or a flowing capacity of 12 million gallons. The total is greater than the combined total of the four older tanks with a capacity of .98 million gallons. The study and design that led to the 2014 improvements indicate data on the second chart that the best flow patterns for the treatment train are to leave 5 and 6 on all the time, then phase on the remaining tanks to address high flow.

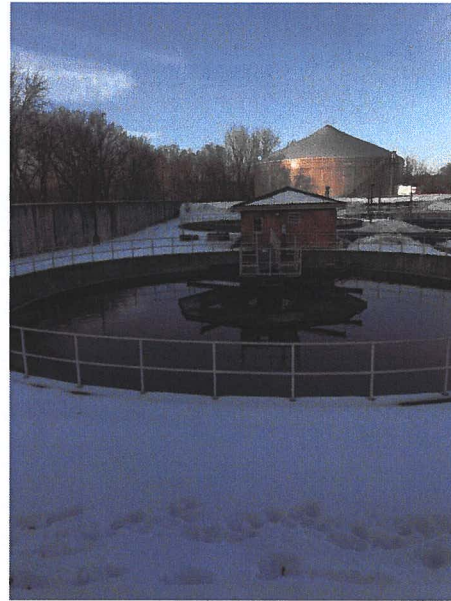
Table 4-8 Secondary Settling Tank Data

	New	Existing	Existing
Number of Tanks	2	2	2
Diameter, ft	80	65	65
Side Water Depth, ft	18	12	8
Surface Area, SF each	5,027	3,318	3,318
Weir Length	226	187	187
Ratio of Flow Split above 12 MGD	44.44%	27.78%	27.78%
Volume, CF each	90,478	39,820	26,546

Table 4-9 Secondary Settling Tank SORs

Flow, MGD	#5 & #6	#3 & #4	#1 & #2
4.75	472		
7.50	746		
9.00	895		
12.00	1,194		
19.67	870	823	823
27.00	1,194	1,130	1,130

Tanks 3 and 4 are the lead, followed by 1 and 2, and then 5 and 6 for flow sequencing. The nonideal operational configuration is related to the limited function of tanks 5 and 6. These tanks cannot draw treatment waste out of the process at initial design, construction, and activation. Subsequently, these are used for high flow, removed from service, drained, and offline prepared for the next storm event. These tanks need to be a priority to utilize as the lead treatment units, given the size and age of the other units. The tanks will be fully functional with the addition of suction lines connected to treatment processes. As such, this requires engineering design review and OEPA approval.



The City of Wooster Utilities Department members has taken a solemn oath to operate and protect the public utility infrastructure and protected public health and trust through stewardship. We seek to be proactive and intentional in our efforts to meet the expectations of the regulatory community and the citizens we serve. Our mission and focus centers on serving the public as stewards and effectively and intentionally managing the treatment infrastructure in a way that honors your trust. We are devoted to our mission of service to you in our pursuit of *Safety, Reliability, and Excellence!*

Nathan W. Coey
City of Wooster
Utilities Manager